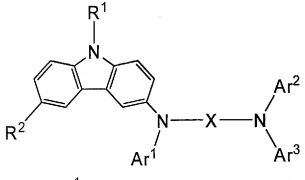
As stated in MPEP §§ 2142-2144.04, to establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some reason, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. Obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some reason to do so found either explicitly or implicitly in the references themselves or in the knowledge generally available to one of ordinary skill in the art. "The test for an implicit showing is what the combined teachings, knowledge of one of ordinary skill in the art, and the nature of the problem to be solved as a whole would have suggested to those of ordinary skill in the art." In re Kotzab, 217 F.3d 1365, 1370, 55 USPQ2d 1313, 1317 (Fed. Cir. 2000). See also In re Fine, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988); In re Jones, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992).

The prior art, either alone or in combination, does not teach or suggest all the features of the independent claims. Independent claims 1-3 recite a carbazole derivative represented by a general formula (1) (shown below),

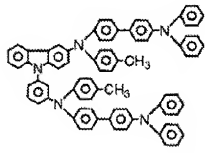


(1)

wherein R^1 represents any one of hydrogen, an alkyl group having 1 to 6 carbon atoms, an aryl group having 6 to 25 carbon atoms, a heteroaryl group having 5 to 9 carbon atoms, an arylalkyl group and an acyl group having 1 to 7 carbon atoms. Similar subject matter is recited in independent claims 7-9, 13-15 and 19-21, with respect to a

carbazole derivative represented by general formulae (3), (5) and (103), respectively. For the reasons provided below, Kitahora, Aoki, Matsumoto and Kawamura, either alone or in combination, do not teach or suggest the above-referenced features of the present invention.

The Official Action asserts that Kitahora "discloses an amino compound ... where one such example compound is disclosed [reproduced at right]: ((19), page 7 such that R^1 = aryl group having 25 carbon atoms (substituted phenyl group), Ar^1 = aryl group having 7 carbon atoms (substituted phenyl group, Ar^2 = Ar^3 = aryl group having 6 carbon atoms ..." (page 3, Paper No. 20100916). The Applicant respectfully disagrees and traverses the assertions of the Official Action.



As noted in the Response filed on July 19, 2010, compound 19 of Kitahora, on which the Official Action expressly relies, only potentially teaches that an alleged R^1 has 37 carbon atoms, not 18 or 25 as the Official Action asserts. Specifically, the Applicant notes that in compound 19 of Kitahora, Ar_3 = C_6H_4, Ar_4 = C_6H_4-CH_3 and Ar_5 = C_6H_4-C_6H_4-NPh_2. Accordingly, the substituent group that the Official Action appears to correspond with R^1 has a total of 37 carbon atoms. Without addressing the Applicant's specific arguments with respect to compound 19 of Kitahora, on which the rejection is expressly based, the Official Action merely states that "the Examiner disagrees ... [it] should be noted that Kitahora allows a wide variety of aryl groups of Formula (I) ([0017]) which is evidenced by the fact that Ar^3 = Ar^4 = Ar^5 can be a 6-membered phenyl group resulting in R^1 (of Formula (1) as defined by the Applicant) to have a total of 18 carbon atoms ((1), [0034])" (page 10, Paper No. 20100916). The Applicant respectfully disagrees and traverses the assertions of the Official Action.

The Response to Arguments section of the Official Action fails to address how Kitahora's compound 19, on which the rejections are expressly based, has an aryl

group having 6 to 25 carbon atoms corresponding to R^1 of general formula (1). Moreover, paragraph [0017] of Kitahora does not demonstrate that a corresponding R^1 of Kitahora's compound 19 has 6 to 25 carbon atoms. To the extent that the Official Action appears to rely on paragraph [0017] to suggest that $Ar_3 = Ar_4 = Ar_5$, such that R1 has 18 carbon atoms, the Applicant traverses the suggestion, and notes that compound 19 does not include such equivalent structures of Ar_3, Ar_4 and Ar_5. To the contrary, and as previously asserted, compound 19 evidences $Ar_3 = C_6H_4$, $Ar_4 = C_6H_4\text{-}CH_3$ and $Ar_5 = C_6H_4\text{-}C_6H_4\text{-}NPh_2$, such that the entire structure allegedly corresponding to R^1 includes 37 carbon atoms.

Furthermore, to the extent that the Official Action appears to suggest that compound 1 of Kitahora's paragraph [0034] includes an R1 having 18 carbon atoms, that the Official Action omits any rationale for modifying compound 1 to include the remaining limitations of general formula (1) of the claimed invention. For example, Kitahora's compound 1 does not appear to include either a bivalent aromatic hydrocarbon group having 6 to 25 carbon atoms or a bivalent heterocyclic ring group having 5 to 10 carbon atoms and the Official Action does not explain how compound 1 would be modified or combined with other asserted compounds to obtain a structure that includes each and every feature of the claimed general formula (1). Similarly, with respect to claims 7-11, 13-17 and 25-27, the asserted compounds do not correspond with the claimed carbazole derivatives represented by general formulae (3), (5) and (103). Furthermore, Aoki, Matsumoto and Kawamura do not cure the deficiencies of Kitahora.

Therefore, the Applicant respectfully submits that Kitahora, either alone or in combination with Aoki, Matsumoto and Kawamura, does not teach or suggest the claimed carbazole derivative represented by any of general formulae (1), (3), (5) and (103).

Since Kitahora, Aoki, Matsumoto and Kawamura, either alone or in combination, do not teach or suggest all the claim limitations, a *prima facie* case of obviousness

cannot be maintained. Accordingly, reconsideration and withdrawal of the rejections under 35 U.S.C. § 103(a) are in order and respectfully requested.

Should the Examiner believe that anything further would be desirable to place this application in better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number listed below.

The Commissioner is hereby authorized to charge fees under 37 C.F.R. §§ 1.16, 1.17, 1.20(a), 1.20(b), 1.20(c), and 1.20(d) (except the Issue Fee) which may be required now or hereafter, or credit any overpayment to Deposit Account No. 50-2280.

Respectfully submitted,

Eric J. Robinson
Reg. No. 38,285

Robinson Intellectual Property Law Office, P.C.
3975 Fair Ridge Drive
Suite 20 North
Fairfax, Virginia 22033
(571) 434-6789